

THE TIGER



Martenstein, '13.

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LITERARY



The Master of Wyola

J. BRUCE, '12.

"Often men don't live long out here," said the old driver significantly, "an' what's more, us kin never find out who stopped 'em from livin' either."

"No?" the little man, seated beside the driver, spoke in a tone appropriate to his size.

"Why, thar's the killin' over Baker's—that thar inn on top o' that hill—hull family; done in one night. Ole man Baker says, he were at thar station, an' it were done when he were gone. Yu see, he ain't married an' he'd left his boarders to kept the shack. That were never cleared, an' then thar's Pete Thomson—he used to run that thar ferry goin' 'cross Noisy Creek—well, he was found—Oh Lord, what a sight—his head clear turned around, an' thar's——"

"You!" cried the frightened listener, "better look out for this curve."

"Betcher a good plug o' terbacker I kin make this ole bus go round it on two wheels."

"Never mind, here's a plug; for the good Lord's sake, go easy."

"Thanks. A sleepin' place ain't far off. To-morrow we kin make the mines. How long yu goin' to stay?"

The little newcomer surveyed the dismal surroundings and hesitated.

"Well," he replied at last, "perhaps a week. Wyola's a poor land."

"Yes," said the old driver, as his eyes wandered back toward the ferry and the inn on the hillside. "Yes, Wyola's an awful dump."

Sitting over a hearty, but none too elaborate dinner, the "greenhorn" pondered over the words of his late companion. Again and again he read the message and clinched the dirty, crushed envelope he held in his chubby fist. The message was short, but to the point. He scanned it still again.

"Dear Brother Lin," he read, "I found an excellent mine. It is gypsum and in abundance. The ranchers don't know their mistake and I can buy it for a paltry sum. Bring a thousand with you, conceal it well, and 'mum's' the word. Your brother, Phil Myers.

"P. S.—Old Finney will meet you at Lodge Grass with his bus."

Phil had been from home nearly fifteen years and this was the first message to let the anxious family know of his whereabouts. How sudden it had been, coming like a voice from the "gone but not forgotten." Phil always was liked at home and Lin could just remember how, in a sudden fit of melancholy, he had cursed every one within a mile, and, still surly, had packed and gone—gone, no one knew where, or the reason of his going. Forced by the family, but not by his own nature, Lin had at last set off, concealing a

hastily gathered thousand in a gun case. Arriving at Lodge Grass, he had clambered from the train, asked to be allowed to wash, been laughed at by the burly driver and the lounging men and then had ridden meekly and quietly over a road worse than a newly plowed field.

Now he felt anything but jovial, and he stood undecided whether to go on or return. Still the letter read like a call to riches—wealth almost beyond the dreams of avarice. After all, perhaps it would be better to face the bad lands, risk and win; not that he was poor, but on account of the axiom of long standing among business men—enough is never sufficient.

On the morrow he again mounted beside the stage driver and rode off to the bad lands. Old Finney was silent, answering Linsen Myers with monosyllables only. With the silence grew the fear and restlessness in Myer's breast, and he was much relieved when the rickety bus drew up at a shamble mine.

"Where's my brother?" asked Linsen, getting down and looking around in a perplexed sort of way.

"Axe me," answered the driver, phlegmatically.

Myers looked petulantly at the shack and then toward the mountains, behind which lay the land of the rumbling locomotive and civilization. The old bus had disappeared around the bend, and in hopeless despair the little man entered the empty shack and hid himself in an odorous bunk.

Toward evening, Linsen Myers awoke, and was awed by the apprehensive silence. Sitting still he at last heard a faint brushing sound breaking through, at short intervals, the fearful silence. He peered over the bunk. There, sitting on the edge of a lower bunk, was a middle-aged man, dressed like a vagabond of the plains. His long legs spread out along the floor and his broad, yet bent, shoulders showed that he must have been of gigantic stature. In his hands he held and brushed an old, dirty vest.

"Hang it all," he muttered. "I hate to strike her, but——"

The low creaking of the door, then the light patter of moccasined feet heralded the entering of a little tan-faced woman. Her once smooth face, now coursed by galloping wrinkles, looked pleadingly at the human bear. The dirty piece of skirt, bound about her forehead, told significantly about the quarrel and its ending.

"Jem!" she cried, placing her calloused hand upon his arm, "why did you send me to the city school? I, an Indian girl. Was it to come back and receive blows? Jem, I've worked hard for you and now——"

"Well, what do you want?" said Jem, curtly, seeing through her words.

"The life of your brother, Jem; the one you and Finney trapped here; the one asleep up there. Jem, you've been too diabolical in your work. Take the money and let him go."

The man was surly. "Go 'way, Letta, I feel dreary. Where's the medicine I told Fin to bring?"

"Jem, not this time; the evil's growing. Twice yesterday and once the day before is too much. Jem, you won't this time."

He snatched the lotion from her and she sank in the corner, watching the semi-insane man prepare another morphine tablet. The stimulant was not long in forcing his mind into a senseless passion.

"Fin," he cried, "Fin."

The creaking door admitted the old driver. The bear was on the floor. The driver stood over him as if transfixed. It didn't take long to see that the drug had taken its own course, and even the miner's huge physique could not repel the oncoming tide of death. Suddenly the face of the old driver relaxed; the vacant stare was gone.

He stepped nearer and hissed in the fallen miner's ear, "You're done this time, you chief of fiends! You held me here by your fist; made me your

dog! Huh! Jem, do you 'member old Pete Thomson? Do yu 'member Bakers an' the hull bunch? Well, thar all a' goin' to be lookin' fer you—an' me, too, I guess. I got you this time. I ain't yours no more an' when us meets again we'll be equals."

The little woman rose and fell upon Finney. "Tell me!" she cried. "Is this true?"

"Yes," replied Finney. "I made that pill. It's doped," and he laughed insanely.

Together they knelt before the dying man. Only for a moment did the driver kneel, and then he rushed for the open door—and was gone.

Down from the bunk crept Linsen Myers. Going to the door he stopped. The sickly sun was sliding over the farthest ridge—inside a faithful woman wept beside a faithless man, and out in the forest he heard the insane laugh of the stage driver.

The End of the Trail

ALICE SCHMELZ, '11.

Long before the scorching sun cast its first rays over the eastern hilltops, all the boys were astir and preparing for an early departure. They had been on the trail for nine days, and it was with heavy hearts that they mounted their horses and started off. The men were beginning to lose hope, and old Jim Rawson was the only one who had anything to say. But now even he was wearing a hopeless look, and this surely was an ill-omen to the boys, for Jim was the last man on earth to give up, as they called it. The food supply had all but reached its end and there were few springs to be found.

Just nine days before this the little son of the late Captain Everett, their former leader, had mysteriously disappeared, and they had every reason to believe that Red Bear and his band had stolen the child. The boys had started out immediately to trace him, and now it was the dawn of the tenth day and they had not seen or heard of the child since.

The boys were beginning to get tired and wanted to return to the fort. The child must be dead, or they would have found him long before this. Old Jim had encouraged them all this time, but now they were determined to start back.

Captain Everett, a widower from the East, had come to the fort with his little son about two years before. In a skirmish with a roving band of hostile Indians the Captain had been killed, and Jim Rawson, being very fond of his little son, had taken the child to live with him. He loved the boy as if he were his own son, and was wild when he disappeared.

Jim was determined to find him if he had to ride to the end of the trail, so he and the boys had started out. But now the boys had deserted him, telling him that it was nonsense to stay any longer, that the child was dead, and that they were needed at the fort.

Still Jim would not give up, and with heavy hearts the boys left him. He would not give up the search until he had found the boy or died in the attempt. The country was wild, too, and bands of hostile Indians roamed the plains. Still Jim was determined.

For five long days, with the scorching sun burning down on him, the old man looked in vain. For five weary nights he roamed without food or drink. He could not last much longer. His poor horse stumbled and broke his leg, and Jim had to shoot him. Every sign of life was then gone. Jim was alone.

The sun set and one by one the stars came out. It grew cold, but still Jim lay there. The hours passed and once more the burning sun peeped over the eastern hills, but Jim did not care now. He had reached the end of the Trail.

The Captain's Misfortune

G. F. HARRISON, '14.

It was a dreary day, the rain was falling fast and the wind was blowing at a tremendous rate.

The great sea waves broke on a sandy beach of the Pacific like a mighty roll of thunder.

As I walked along the beach on my way to an old sea captain's place, I could not but think of the sad story he had told me of his wife and a child who were drowned on a cold and rainy day just like this one. They were on their way to meet him and his ship, to sail for an ocean town where he was to give up the command of his ship and live happily with his wife and child.

But alas! a storm came up, the wind blew the ship on a rock and it sank in a short time.

The lifeboats were lowered, but the waves ran too high for the small craft and they were all overturned. All but one man were drowned and he told the sad tale of how the mother was sitting in a small boat, holding in her arms the little child and looking into its small but bright blue eyes as if to say, "Our time has come."

I was now at the house of the old captain, and looking in the window I saw an old man sitting by an open fireplace.

The embers were all that were left of the fire, and all the room, except the one small place where the old man sat, was dark.

I could see him plainly, and the coals threw a beautiful light on him. His chin rested in one hand and in the other hand was a picture of a beautiful young lady holding a little boy fast asleep.

I heard the old man say as he gazed at it, "It was just such a night as this."

A Meeting in a Strange Land

CHESTER M. AGNER, '14.

When I had finished reading my letter, unconsciously I leaned back in my arm chair, which I had placed under the shady trees in the garden, and allowed my thoughts to wander far away into a land where the tropical sun sent its burning rays upon the heads of my two chums, who were visiting some friends in the Republic of Nicaragua.

They had been in that country about two weeks, but that short time was long enough to involve them in a drama in which they had never dreamed of taking part.

The following is the letter which I received from them:

RAVAS, Nicaragua, July 7, 1910.

Dear Frank: I will not take time to explain to you why I have not written before, but if you are not a blockhead you will know without my explaining, after you read this letter. To make things a little more interesting for you, I will try and make a sort of story out of my letter, if you wish to call it a story.

CHAPTER I.

The burning sun of the tropics had not yet reached its highest point in the heavens when Len and I passed through the iron gateway, which was the main entrance to the military prison of Nicaragua.

As the corporal of the guard was attending to some important business, he put us in charge of the prison doctor, who happened to be a very interesting fellow. Taking the keys which the corporal gave him, the doctor led us down a small hallway which led to the extreme end of the prison facing Lake Nicaragua. On reaching the end of the hallway, we descended a winding stairway, the bottom of which was below the level of the lake. As we continued to wind down the stairway, Len, who had been joking with the doctor, said that we would soon reach China if we went much further. We found the air at the bottom of the stairway quite damp, and before we had walked many feet along the dark and narrow passageway our teeth began to chatter in an extraordinary manner. This made us forget that within fifty feet of our heads the heat of the sun raised the thermometer to an extreme height.

But our own discomfort was soon to be forgotten, for on entering one of the cells which lined the narrow passageway, our eyes met a sight that will never be forgotten.

Sitting on an old bench in the corner of the dark cell, with his arms resting on a table, sat an old man reading by the dim light of a candle, which at times was almost extinguished as the water, which had oozed through the ceiling of the cell, dripped down upon the table. As we continued to stare at him he gave a quick glance at us and then, as though he were in great sorrow, lowered his head into his arms and began to mutter something which made my heart stop beating for the instant:

"What is one more insult? What is one more sorrow? I will not live to-morrow, for I am dying."

We did not quite understand what the old man meant, but our guide explained it after we left the cell.

The prisoner, Mr. Roden, was an American by birth and had been president of a small railroad in Nicaragua. After the revolution broke out, he was accused of helping to stir up the rebellion, which caused him to be placed in the cell where he was left to die.

To add to the old man's misery, the President of Nicaragua had sent his wife and two daughters into exile on a small island in Lake Nicaragua.

When Len and I left the prison there was not a word spoken between us, for we were both trying to think of some plan to help the old man. But think as long as we could, there was nothing that could be done except to help him in escaping. This seemed impossible, for the old man would think we were plotting for the President, so that his guards would have a good excuse to shoot him. Therefore, the things we needed were credentials. Where were we to get them?

CHAPTER II.

When the sun rose the next morning it sent its long rays upon a small launch, containing two passengers, which was making its way to a small island in Lake Nicaragua. But what was the reason for such a small boat heading for an island where there were not inhabitants except exiles? What caused it to keep out of sight of land until the Queen of Night covered the land with a dark mantle, and then for it to creep up under cover of darkness to the strange island? There must have been some cause.

As soon as we had tied our boat to the small wharf, we began to climb a steep path which led to the home of Mrs. Roden.

After plunging on through the darkness for a short time, I thought of the great danger we ran in trying to help Mr. Roden to escape. What would happen to us if we were discovered. Probably we would meet with a like fate, and as I thought of that dark dungeon it made me tremble from head to foot.

As I continued to think of the danger, Len, who was ahead of me, called my attention to the lights that were burning in the front room of the Roden

home, which we were rapidly approaching. Fearing that there might be some one in the house besides Mrs. Roden and her daughters, we stood in the darkness for some minutes watching the windows, but seeing no signs of any one we moved up close to the house in order to see into the room. But our cautiousness was useless, for there were no persons within the lighted room.

To make sure that the Roden family was alone, I made a detour of the house until I came to a window, where the red glare of a dim light attracted my attention.

After motioning for Len to come up, for he had stationed himself at the other end of the house, I peered into the dimly-lighted room where I saw three figures sitting in front of a fire, which was almost burned out. One seemed to be an elderly lady, who was sitting in an old-fashioned chair, while at her feet sat two girls dressed in white.

At this moment the fire, which had been smoldering, began to burn brightly, and as the light fell upon the two daughters I could see them very plainly.

A strange and bewildering feeling crept over me, for as I looked intently at the two girls, I was sure that I had seen them before. But where? That I could not remember for the instant. Then I had another strange feeling, for as I continued to gaze at them I recognized them as my old classmates in college, and I thought of those days when we often walked through the shady lanes and beautiful hills of Berkeley, in California.

At this moment the elderly lady began to talk in a low tone. The few words which I heard caused me to run at full speed to the door.

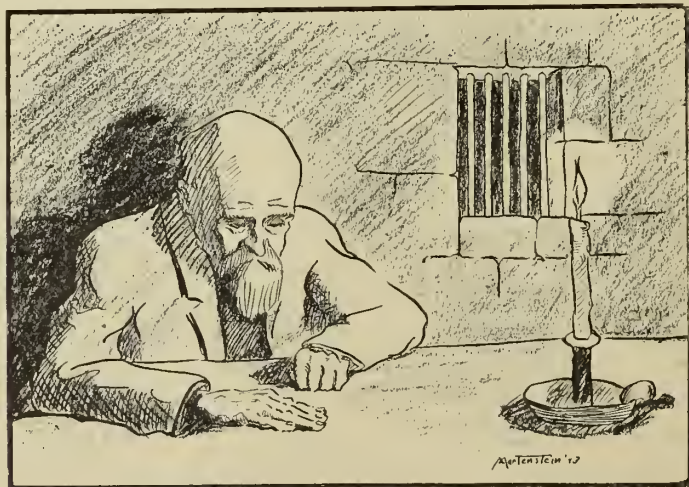
"I would lie, cheat, steal, if I could save your father a minute's suffering."

What happened after this I will not take time to explain to you now, except that the launch which crept up to the wharf during the early part of the night, soon left with three more occupants. But where it went no one knew.

Well, Frank, there is nothing more to tell you in my letter, except that I am bringing home a beautiful girl, who promises to be my wife after I get her father released.

If you wish, you may meet us Saturday at the wharf when we land.
Your old chum,

JACK NEWTON.



The "Mary Ann"

WILLIAM LAFRENZ, '11.

"Hand me a light, Jack, my pipe's out."

His wish fulfilled, he turned silently toward the window. I can see him now; his large head set on a massive pair of shoulders. He seemed to grow in the dim, flickering, misleading glow of the fire. His countenance, darkened by the shadows, seemed to reflect something of the view without. Dreary and stormy it was. Somehow, it brought to my mind my orphaned state. The whistling of the wind and the roar of the surf seemed to strike a responsive chord in my breast: a faint recollection as of a dream.

Suddenly, with a shout, my companion sprang to the door.

"Come in, Cap, come in." With this he hauled in a grizzled and well weather-beaten old tar, and, by main force, shut the door against the wind and rain. The "storm man" was Captain Tubbs, pensioned life-saver and our fast friend. After helping himself to a chew he sat down and remained silent for a time. An ember popped and burst into light. I glanced at him. His staring eyes were fixed upon me. Then the ember died down. His voice, recalling the deep and moaning sounds of the surf, broke the silence.

"Boy, this night reminds me of the wreck of the 'Mary Ann.' They claimed the pilot was bribed, bribed by a young man, who with his wife, was in a hurry to get to shore. That was a falsehood, Jack. The pilot knew his duty and he couldn't be bribed. He loved this young man, but he loved his son better. The anchor hawse would not hold and they were off a lee shore.

"How well I remember that night. The waves came up past the dunes. My beat was two-thirds under water. As for the wind—well, I had to back up against it. Boy, it was all I could do to hold on my pea-coat and sou'wester. God, how I hoped nothing'd hit the bar that night. It took me two hours to walk that patrol. I remember I forgot my costen lights; left 'em lying; I went back for 'em, my head bent low in fear of the blast.

"My eyes narrowed to slits. I saw, oh, so faintly, the spars and riggin' through the haze. I looked again and again to be sure. Jack, there was a dark bulk of a ship in that sea of foam. I took a coston signal, put it in the handle, struck it on my boot. A brilliant light glared out. A sullen boom came over the water and a blue rocket shot in the air. I knew they had seen the coston and breathed a prayer of hope. I raced to the station and reported to the captain. The ship had struck on the outer reef. Deep water lay on either side.

"'Man the life boats,' was the cry. Through the roaring surf we plunged. Each man knew his place. As each breaker curved high above us, the steersman, with practiced skill, kept her head to the seas. We raced down on the lee of the ship. Just as we got there it lurched over the bar and rushed headlong on the shore. Waiting for it to strike we followed amid a sea of foam.

"We pulled, pushed and lifted out the beach patrol. We dragged it on a run to the nearest point. Among the lummocks and wreckage we buried the sand anchor, a cross of heavy timber. Others placed the bronze cannon in position. Bang! The coiled line ran out with a silent swish. One, two, three minutes. Then a yank. She had caught the first time. A heavy line was run out. On this was strung a breeches buoy for one man. Barely was it strung when a green rocket flared. That meant a large number of passengers. The buoy was unslung and a boat-car of waterproof wicker was strung. The work of rescue began. Seven passengers got in. We pulled to shore. The car, carry-

ing its precious burden was hauled to shore. Now and then it dipped into the crest of the waves.

"Within fifty feet of shore the mast gave away. It fell with a crash, tearing out the sand anchor. No trace remained of the car although we patrolled all night. About two in the morning I found a piece of wreckage floating inshore. With the aid of hooks it was drawn ashore. Boy, there were three persons in that bundle lashed together. One guarded a small child from the waves. Two were dead, but upon working over the child it was restored. The dead body had saved him.

"Jack," here his eyes glowed strangely, "you were the only survivor of the ill-fated 'Mary Ann.' The other two were your mother and the pilot. He died to save the loved ones of your father."

The wind whistled. I stirred in awe of the storm. The fire had gone out. As I stirred it up I seemed to see the spars of the ill-fated "Mary Ann" rise in the flames.

For and Against

ARTHUR W. WYNNE, '11.

"Halt! Who goes there?"

From behind a clump of bushes came an answer in broken English, "No shootee, we flends."

Reassured by the sentry that he would not fire, two Filipinos stepped out into the moonlight. I saw the little brown men nervously watching the gun, which was pointed at them.

"Ah, Lieutenant Butler," said the sentry, saluting me, "you're just in time. These goo-gooes have been prowling around out there in the dark."

"We—we flends," spluttered out one of the Filipinos, grinning and showing a row of ivory-like teeth. "We come to tell you somethin', maybe." He grinned again. "We flends." He purred like a cat and rubbed his hands together, after the fashion of a Japanese.

"Well!" I commanded

With much rubbing of hands, purring, grinning, and "we flends," they told us that there was a Filipino camp about ten miles from where our own was situated. They did not know the number of the foe, but told us it would be an easy matter to capture their camp; and also, that they would direct us there.

I doubted their story, for Filipinos are very treacherous; but they stuck to it and told a very consistent one, although I cross-questioned them both very closely.

At last I brought them to the captain. Here they again repeated the same story, which we both accepted finally as the truth. Although we threatened to hang them and riddle their bodies with bullets if there were any treachery, at the first doubtful movement, and although we pressed them into service as guides, they still stuck to their "yarn."

The order to break camp was given. Soldiers hastened here and there. In half an hour we were on the march.

We were marching toward a Filipino encampment of unknown number, a thing which requires bravery and courage; but Captain Wills had not hesitated a second after he believed what the "goo-gooes" said was true. This deed later won him the compliments of the President as well as a promotion.

A vanguard had been sent out to prevent a possible ambushade. "We'll take

no chances, 'Walt,'” Capt. Wills had said to me, “of them taking us as unexpectedly as we expect to take them.”

We, of the Second Regiment of California Volunteers, had been sent to the Island of Leyte to trail a band of Filipino riflemen, who had been marauding the island. This we had been doing ever since we had left two battalions of the regiment, under Major Duncan, three weeks before. They, among whom was my only brother, “Billy” Butler, also a lieutenant, had started to circle Leyte in one direction, and we in another. According to our arrangements, we were to unite in a day more. The riflemen whom we were to trail had managed so far to keep out of our way. We were almost certain also, that the Filipinos, the foe we were now marching against, were not those whom we were after, but a new foe.

By the time we reached their camp the moon had set, leaving an almost pitch-black night. They were situated on a knoll at the foot of which was a thick wood. With military instinct, I knew that although the forest was unfavorable, the place afforded the best possible entrenchments for miles around.

Moving on his beat, as he passed from the utter blackness of a clump of trees into lighter darkness, I could half see, half-feel, a Filipino sentry. In a few minutes that soldier would be a thing of the past. Our men were stationed around the foot of the hill, completely surrounding the natives. The soldiers took their places noiselessly. All was silent. Then,—a single shot rang out,—the signal of attack. From all sides of the knoll came the flash of Krag-Jorgensons. To those in the camp it must have seemed as if the very woods had sprung to life.

Up the hill, I could see that they were almost in a panic. Lights flashed here and there in confusion. Then all went out—they were too foxy to let us have the advantage of the lights. Shots had been fired at random; but, now, they seemed completely organized.

I had thought we would gain an easy victory by the suddenness and unexpectedness of our attack, but I knew now that we were in for a fight. The advantage we had gained by surprising them was more than offset by their position. There was only one thing to do; to charge up the hill, and we did it.

Half way up we went, but their steady fire was too great to withstand, so we beat an orderly retreat. Again and again we charged only to be driven back. Fiercely they fought us; fiercely we fought them. The ranks of both sides were thinned by the terrible fire. Never before had any of us seen such a battle. The men were as wheat trying to resist the mowing machine.

We reorganized our forces for one final charge. A corporal had seen one of the enemy dressed in the uniform of the United States, taken—we doubted not—from the dead body of an American soldier. When they heard this “the boys” went into a rage. I never before felt the anger I did at that moment. With such an incentive, there would be no stopping the final charge.

Charge! The order came—the last if we did not reach the top of the hill. Up, up, on and on, we went. Men fell by my side as I climbed, but others sprang to their places. All were eager to avenge their dead comrades, to seek revenge on the “goo-gooes” who wore the American uniform. Further, still further on up we went. The enemy advanced to meet us, but we never faltered. There would be victory or annihilation—no order to retreat could send the men back now.

My revolver, long since useless because of lack of cartridges, lay somewhere far down the hill. The gun, which I had taken from a fallen comrade, was for the same reason, useless. My sword alone remained. With it raised aloft I still led the attack. We fight hand to hand now. My saber comes down from aloft. It has better work to do. Swinging it right and left I still advance. Something stings my right arm, it hangs useless by my right side. But in my left is clutched the sword. A Filipino steps in my path, trying to prevent me from

going on. He does not fire at me; he, as I, must be out of shells. Our swords meet with a crash. We fight silently, back and forth, each striving for an advantage. He forces me to give ground until the footing is uneven. I stumble to one knee; the "goo-goo" makes a desperate lunge, but misses, throwing himself off his balance and giving me time to recover. To defeat him I must force the fight. I rush at him, wielding my sword with all the strength and skill of my left arm. He fights back fiercely, and gamely; but from his blows I can tell it is a matter of only a few seconds until he will lie at my sword's end. Suddenly my left hand tires and with one twist the Filipino disarms me. His sword starts the stroke which will end my life. I laugh and say: "Do your worst, you 'goo-goo,' it is sweet and glorious to die for one's country."

The sword stops with its point at my heart. "Good God, 'Walt!' how did you get here?" cries a voice.

"Billy! Billy! Where did you come from?" I reply. It is my own brother! He who had been with the other division. Slowly the truth dawns on me. "We've been fighting our own men, Billy,—fighting our own men," I cry wildly. "It's been your division against mine. We've been fighting for and against our country."

"If I had killed you," sobbed Billy brokenly. Then our duty became foremost in his mind. "We must let the others know."

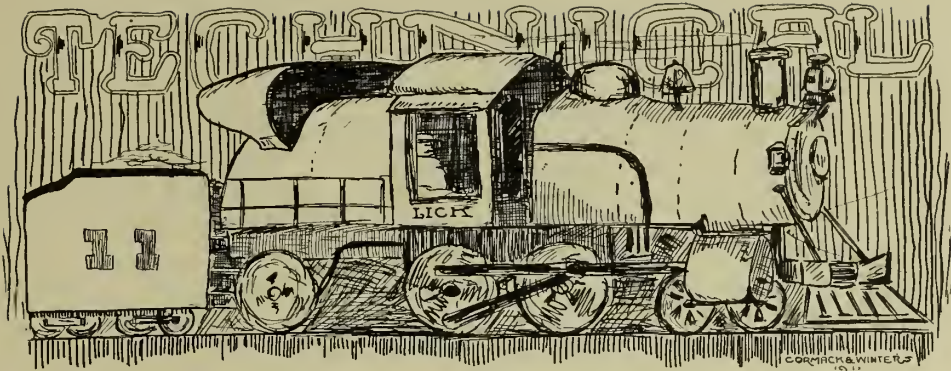
In a few minutes the firing was stopped. All was silent; then broke forth the thunder of fifty rifles.

Captain Wills had kept his promise. From the branch of a tree hung the bullet-ridden bodies of two treacherous "goo-gooes," who to their own people were martyrs.

"The Storm"

CATHERINE BOYLE, '12.

A sky of gray, shot through with crimson bars
Which gleam like fiery torches in the west
And tinge the caps of foam on ocean's breast
With red. Night falls, but hidden are the stars
By banks of clouds, which seem to be
But a reflection of the sullen sea.
The chill winds dash aloft the foam and spray;
A wild seagull, blindly gone astray,
Beats his long wings against the lighthouse tower;
Belated fishing smacks seem fearfully to cower
Among the waves. We hear the never-ceasing roar
Of angry breakers on a wild, wet shore.
Above the rush and roar comes the deafening crash
Of thunder, the sharp hiss of rain; a lightning flash,
Then silence black—then lifts the Stygian mantle of the night
And the storm breaks forth again in all its might.



The Manufacture of Mirrors

O. L. BARKER, '11.

Many years ago, when clothing and society were not appreciated to any marked degree, some thirsty person, in stooping to drink from a pool, saw a face in the water. When he had overcome his first superstitious fear, he repeated the experiment and then called the attention of his wife and daughter to the phenomenon, and when they saw that their own faces were reflected, they began to think of rings for their noses. Thus vanity was born when the mirror was discovered.

Since that time skilled mechanics have been engaged in making portable substitutes for the pool. At first the result of their labor was a polished piece of metal, usually bronze, silver or brass. The use of metal mirrors continued until comparatively recent time, and then some man who could not afford a metal one devised a glass mirror. He discovered that a small amount of metal would make a thin layer on the glass, and that its bright surface, being hermetically sealed, did not require polishing. From that time to the present, mirrors have been made of glass, and the process of manufacture has changed only in detail.

To begin with, a mirror requires the finest kind of glass, absolutely free from spots, specks, and "blow holes." The best glass is the plate manufactured in St. Gobain, France, and in Belgium. This comes in large pieces, a quarter of an inch thick, ten or fifteen feet long, and half as broad. A number of these plates are packed in excelsior in a box. When the glass is unpacked it is covered with dust and the first operation is the washing of it with water.

Then a dozen men, who are experts at handling glass, carry it into the cutting room. Here a workman—usually French,—blocks out an order on the plate, say two or three beveled mirrors for some lady's boudoir. A diamond-pointed instrument, guided by strong and steady hands, traces the lines of the drawing on the glass and cuts a groove so deep that the pieces crack out evenly.

These oval pieces are then taken into a room filled with the noises of rapidly moving machinery. Here a thin-faced foreigner, with arms bare and a ragged apron covering him from head to foot, picks them up, one at a time, and holds the edges on the side of a swiftly moving iron wheel. From a wooden tank, which resembles an ash-leach, a stream of sand and water

flows onto the wheel, and in passing between it and the glass grinds the bevel. The trueness of this bevel depends entirely upon the skill of the operator.

When this process is finished the bevel resembles "mist" or ground glass, being full of rough places and scratches. The next operation is the smoothing of the bevel on a rapidly revolving emery wheel. When it is as smooth as this process will make it, it is passed to a third man, who applies it to a fine "Newcastle" grindstone, and in two minutes all traces of roughness have been removed. A small boy sitting above the next, a wooden wheel, daubs it with a wispbroom soaked in water.

By this time the bevel looks very smooth to the ordinary eye. But to the trained workman who has spent his life at this kind of work, it is far from perfect, and he passes it swiftly over a wheel which is smeared with rouge. In this part of the shop the men, the floor, the tools and the visitors are coated with red. When the mirror has been passed over the rouge wheel it is supposedly perfect, and it is sent to an expert for inspection. If he finds any scratches he marks them with chalk, and a man with a piece of cloth smeared with rouge, rubs until they disappear.

The glass is now ready to be silvered. This is done in a close, hot, well lighted apartment, where the men wear very little clothing. In one corner of the room there is an inclined plane of boards, which resembles a large washboard turned on its side, and on this the pieces of glass are placed, face downward. A stream of water is spouted across them to clean off the dirt. A sensitizing solution of tin, the exact composition of which is a trade secret, is then turned on, after which a workman gathers up the glass and places it on a "bed."

Although not provided with pillows, the "bed" is complete in most respects. There is a blanket strung across a frame about the size of an ordinary bed, and over it a cotton sheet. Beneath, so that the blanket just touches its surface, is a large tank of water, heated by steam pipes. The embryo mirrors are laid, face down, on the bed and while still wet with the sensitizing solution, a dilute compound of silver nitrate, ammonia and tartaric acid is poured over each. The exact composition of this solution is also a trade secret.

The action quickened by the heat from below and by the tin solution, the silver is precipitated on the glass. When the coating is apparently thick enough the surplus silver nitrate, etc., is poured off and the mirror is put in a warm bed to dry off. The back is then covered with a protective paint. Frequently, in special orders, the backs are covered with felt.

The silvering process is very wasteful, hence many devices are tried so that as much as possible may be saved. The blankets and coverings of tables are sent to refineries where they are burned, thus recovering about twenty per cent of the silver.

The whole process of making a beveled mirror takes, under present conditions, less than an hour.

The Solar Motor

SYDNEY R. LEWIS, '11.

The world to-day is a world of science. It is a world of people who want to know "how" and "why." It is a world of inventions and inventors, striving for "something better"; and in quick bounds succeeding. We have among our inventions, our electric cars, our phonograph, our wireless tele-

graphy and our telautograph; we take photographs of objects never seen by the naked eye, we show on screens the path of a bullet through a soap bubble, one of the fastest objects in the present world. And yet with all these inventions we are still primitive. We harness the power of mighty rivers, making them do all sorts of labor. We are conquering the air, the greatest of all elements, and last but not least we have succeeded in conquering, harnessing and using that heavenly body called the "sun."

You have all heard of "motors," electric, gasoline and water, but did you ever hear of a "solar" motor, a "sun" motor? Can you, in all your dreams, imagine such a thing. A motor run by the heat of the sun? Can you imagine a huge cone with the vertex missing, a hollow frustrum of a cone? Well, then, imagine one composed of mirrors, lined with eighteen hundred mirrors, each two feet long by three inches wide. This cone supported on an iron framework is such as is used by a Pasadena Ostrich Farm. The inside faces the heavens and is "in meridian," i. e. at right angles to the path of the sun, which it follows all day by a set of clockworks.

In the focus of these mirrors is a boiler thirteen feet and a half long. This boiler is coated with a black heat absorbing substance. It holds over a hundred gallons of water, and is fed automatically. This raises steam untended all day, no stokers and grimy firemen, only the great Old Sol to do the work. The steam is led to a pump, that is capable of delivering fourteen hundred gallons of water per minute. Think of it, one million gallons a day, by the sun, an engine ninety-two million miles away.

Dr. William Calver of Washington has built in Arizona motors similar to the one described. His travel on circular rails so that they face the sun at all hours of the day.

Dr. Calver controls some sixteen hundred mirrors. Each one develops ten to fifteen degrees of heat. Figure it out, sixteen thousand to twenty-four thousand degrees, a heat greater than the strongest of arc lights or blow pipes.

It is said that these mirrors can, in a few minutes, reduce Russian iron to a state similar to warmed wax. They will bake bricks twenty times as fast as any kiln, not making them friable and easily chipped, but so hard that they will scratch case-hardened steel.

With a principle so simple and a result so great there can only be a revolution in the mechanical world of future days.





THE TIGER

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The students at large seem to think THE TIGER belongs to certain individuals. This is a gross mistake; it is your paper and will be what you make it. Don't let it fall below the past standard. If anything make the paper better than it ever has been.

THE TIGER has been very successful with its staff. Every member has done his duty in the preparation of this issue. To the faculty THE TIGER is greatly in debt for many helpful suggestions which have carried us through many difficulties. THE TIGER takes this opportunity, therefore, to thank its staff and the faculty, and especially Miss Wilkins and Miss Otto.

ATHLETICS.

We are very lucky this year to have a great many of our athletes back, especially in the football team. It is practically the same team as last year. But next year what will we have? That is the question. Are we thinking of the future? It does not look as though we were.

In Lick, as in most other high schools, there is no gymnasium or other source of compulsory training. The students have to rely upon track, football, swimming and other school activities for their exercise. We have all these different activities, and the students have the time to participate in them. But why don't they do it? Did you ever stop to think, or figure out, the number of our athletes? We have about eighty-four, and this number includes the girls as well as the boys. This seems astonishing. Only twenty per cent. of our students take part in athletics.

The student body may be divided into three classes:

First, the fellows who are athletes, and who knowing that they are athletes come out and participate in athletics.

Then there is a second class of fellows, who do not know just what they can do. They want to take part in some branch of athletics, but they are timid, afraid of being laughed at. Some finally come out after much coaxing and have proven to be among our best athletes.

The third class consists of a large number of fellows who do not care about athletics. They think they can go through this world without taking a bit of exercise, and still keep healthy and active.

Now that we know that there are two classes of students who do not participate in athletics, the question arises: "How will we get them out?"

Whatever method is used, it must be interesting and of such a character as to make the fellows feel at home, and not in a position to be made fun of.

THE TIGER would suggest that different kinds of meets be held between the Debating Society, Camera Club, Board of Control and THE TIGER staff. Of course, the participants in these affairs must not be our active athletes.

Then again a meet could be held among the fellows who have never gone out for any school activity.

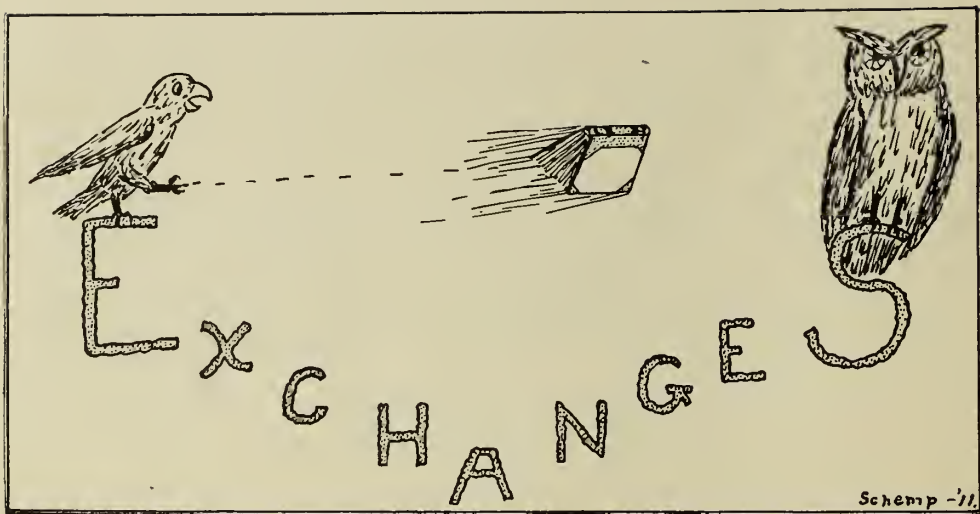
In this way THE TIGER believes considerable interest could be aroused, and our timid fellow classmates would gradually be enticed out. The fellows who do not care for athletics would, without a doubt, become interested in them when they see the benefits derived from a little exercise now and then.

Captains and managers, THE TIGER is with you in everything you do for the good of Lick, and we hope that before long our athletes will increase in number from twenty per cent. to at least fifty per cent.

SCHOOL SPIRIT.

Every now and then some one says that the "Lick Spirit" is gradually falling. This does not make the fellows show up better at the games and rallies, but discourages them, for they think that there will only be a few there, and, "what's the use of going?" Get this idea out of your head, attend the games and rallies and be convinced for yourself that the Lick spirit is still the true old Lick spirit. Do your duty, fellow students, and make this a most successful year. Boost for Lick, make it your duty to attend school affairs and root as you have never rooted before.

Always mention THE TIGER when patronizing our advertisers. This causes you little trouble and augments our chances of getting them to advertise again. Before buying anything look over our ads and see that you patronize our advertisers. This is one way you can support THE TIGER.



It gives the new staff great pleasure to greet their old friends of the Exchange column, and they hope in the future to recognize many new comers. The exchange system exists for the purpose of having our faults pointed out to us by unprejudiced readers. It is in this regard that we wish to criticize some of our exchanges. Some merely acknowledge. Why not give your opinion? Whether it is good, bad, or indifferent, we will be glad to get it, as that is the mission of the exchange department. In view of the fact that we want our paper criticized, we hope in the future to receive more comments. We will now discuss the merits of the following papers in the same spirit of co-operation that we are trying to get for ourselves.

Girls' High Journal.

Girls' High Journal, San Francisco, Cal.—We wish especially to commend your arrangement. Keeping the class prophecy, song, etc., with the class pictures is just right. The poem entitled "The Clever Kittens," is cleverer than the kittens turned out to be. The heading for exchanges is very appropriate.

Searchlight.

Searchlight, San Rafael, Cal.—You are one of our best exchanges. Your story, "Power of Shadow," deserves special mention, but your photographic background gives your paper a crude appearance. It reminds us forcibly of currant jelly. Otherwise your arrangement of material is first-class.

The Totem.

The Totem, Juneau, Alaska.—Same old criticism, Totem, "Put your advertisements in the back." It will increase the value of your paper a hundred per cent. You also lack proper arrangement. Divide your paper into departments and it will greatly add to the worth of your excellent material. Try again, *Totem*! We wish you success.

Tamalpais Graduate.

Tamalpais Graduate, Mill Valley, Cal.—Your material and arrangement are excellent. Your cuts are fine; in short, you have a superb paper. Our only criticism is that your jokes cannot be appreciated. Why not have some that the outsider can enjoy.

Hitchcock Sentinel.

Hitchcock Sentinel, San Rafael, Cal.—In such a well-written paper as the *Hitchcock Sentinel* we find only one weak spot, and that is the exchange column. It spoils the paper to have an exchange column which does not fulfill its purpose; giving only acknowledgments instead of criticisms.

Lowell.

Lowell, San Francisco, Cal.—The general appearance of your paper is good and your caricatures of the 1910 class members are unique and interesting, but your exchange column does not come up to the standard of the rest of your paper.

Far Darter.

Far Darter, St. Helena, Cal.—You are an interesting paper. Having the infant pictures of the graduates adds an unique feature. The paper would be greatly improved by the arrangement of all literary material under one heading. The German story also contains many typographical errors.

Student Engineer.

Student Engineer, Corvallis, Ore.—This paper contrasts strongly with most school papers, but its articles are well worth reading and the reviews from other magazines contain a great deal of useful information.

Commercial.

Commercial, San Francisco, Cal.—Your paper is well gotten up. We wish especially to approve of your cover design. It is very neat and appropriate. Come again, *Commercial*!

Advance.

Advance, Arcata, Cal.—A larger-sized paper and arrangement under departments would make yours an excellent paper. Your material is very good. We also suggest putting the personnel of your staff at the head of your editorials.

Acknowledgments.

Below are our friends whom we have received and are always glad to criticize, but due to a general likeness to the papers criticized above, we feel that it is not necessary to give further comment. Don't think that you are slighted; we will see that your faults and good points are criticized:

Courier, Boise, Idaho.

Crescent, Moorhead, Minn.

Cascadillia, Ithaca, New York.

Oasis, Reno, Nevada.

Calendar, Buffalo, New York.

Crimson and White, Albany, New York.

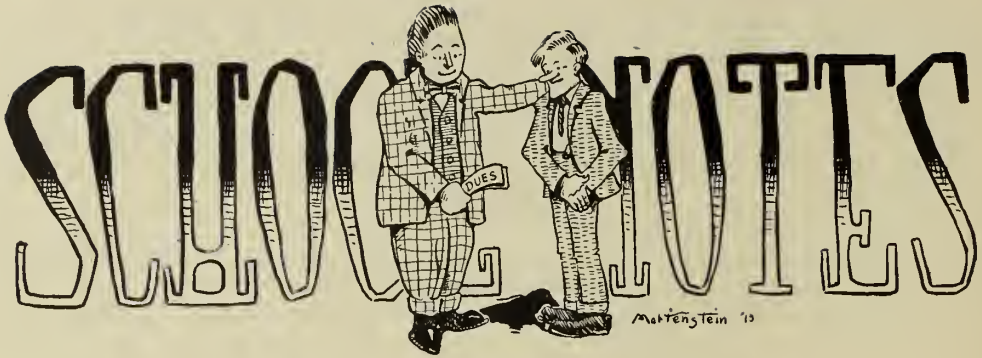
Oregon Emerald, Eugene, Ore.

Tocsin, Santa Clara, Cal.

Tomahawk, Ferndale, Cal.

Olla Podrida, Berkeley, Cal.

Wilmerding Life, San Francisco, Cal.



OUR FIRST RALLY.

On Wednesday, August 10, 1910, President House called to order the first rally of the new year. Although bubbling over with spirit, the classes took their new quarters in a very orderly manner.

Our Yell Leader, Walter Leigh, opened the rally with a rousing Ali-be-bo. He then told us to get behind all our teams and root.

President House informed us that the rally was called for the purpose of boosting Student Activities.

Mr. Merrill then spoke on conditions about school. The applause which followed showed the students' appreciation of his good advice.

Capt. Paul Wetmore spoke to us about our football team and Manager Lloyd Litchfield asked the Student Body to support the team.

"Sammy" Walfish spoke on the orchestra and asked for support.

Capt. George Henderson, of our track team, told us that the track team would be reorganized and that new runners were needed.

Charlie Golcher, '06, advised the Freshies to start out now and train every night, as they would not be successful without good, steady training.

"Curly" Cortelyou, '08, spoke on support.

Hirschler spoke about the Record Book, School Pennant and the Debating Society.

Capt. Halbert spoke on swimming and about the interclass tryout.

"Al" Margo, '10, also spoke on the aquatic sport.

"Herm" Henderson told the small fellows to play football and to go out for track, because it is often the little fellows who have speed.

Walter Moore spoke on the Camera Club and the advantages of the dark room.

Editor Brown asked us to support our TIGER with jokes and stories.

Manager Black urged us to get ads and buy subscriptions.

Carmichael spoke on Interclass Debating and also on the Senate, the Technical and the Dramatic Departments of the Debating Society.

Capt. Sophie Feldermann, of the Girls' Basketball team, asked the girls to come out and practice, so that they could win every game they played.

Manager Jongeneil said, "My name may be Louis, but I ain't trying to sell you nothing," but tennis is the real thing.

Capt. Woods, of the Basketball team, spoke to us about the new fall Interclass.

Messrs. Carmichael, Brown and Boruck were appointed a committee to draft resolutions of condolence over the sad death of our schoolmate, Eugene Speyer. The resolutions were approved unanimously by a rising vote.

The rally was closed with a snappy "Brackity-Ax."

THE "FOURTEEN" CLASS.

Once again a new class greets Lick, and they were welcomed in with all the solemnity and regard due to Freshmen. "Thirteen" can no longer be called "Scrubs," they have joined with the other classes with the "Lick spirit" that makes our Student Body, and have taken part in ushering in the "Fourteen Class," who, we hope, will follow Thirteen's example.

The organization of the class was the second trial of the new system explained by McNair at the meeting. An officer is chosen from each of the upper classes to govern them until they are better acquainted with each other and until they are able to choose competent officers for themselves. Mr. McNair, '11, as president, conducted the meeting, with Miss Boller, '13, as secretary, and Mr. Canfield, '12, as vice-president. A temporary constitution, drafted by the Faculty Advisory Committee, to exist for one quarter, was read, and Miss Otto explained its workings.

The Freshmen were told of the part they are expected to take in the Student Body, and their duty as members of it. President House suggested that they always keep an eye on the bulletin boards, so as to keep up with the various activities going on. The school paper was represented by Editor Brown, who told them what '14 could do to feed THE TIGER, principally "ads, stories and joshes." Litchfield, manager of the football team, gave good advice about participation in athletics in general. He then spoke for football and asked the fellows to try out for the "Big" and "Class" teams. Henderson explained that the class was ready to go into athletics as there was a Bay County Freshmen meet to win. Aside from athletics the Camera Club might appeal to some, so President Moore named the advantages the club has to offer, principally the use of a new large darkroom just being completed. The class was declared organized and the meeting adjourned.

Freshmen, we all hope that you realize what is being done for you and that you will take advantage of it and in a short time be a hard-working class, both for your own ends and the school's. We also sincerely hope that your career as a class will be as successful as your good start. Best wishes, '14!

AFTERNOON TEA.

The Lick Faculty entertained the new teachers at an afternoon tea on Wednesday, August 31, 1910. The lady teachers from Wilmerding were also guests at the reception. The affair was pronounced a decided success by all present.

During the afternoon Miss Irene Saywell, '12, presented a hand-painted Bear Flag, 15 feet long by 7 feet wide, to the school, through Mr. Merrill.

The new teachers are Miss Helen M. Wilkins, Miss Stella Boulware, and Miss Margie Dunlap. THE TIGER, in behalf of the student body, wishes them a very successful career at Lick.

THE DEBATING SOCIETY.

The Debating Society is going to be the most active organization in the school, according to President Hirschler. He and his committee chairmen have mapped out a most busy year. Manager Carmichael will start the Interclass debates for the Lincoln trophy the first week in September. Hevnenman expects to have the Short Story Club busy in a few weeks. Lenzen says that the Technical Department expects to give some of the best lectures ever given in the school. Wynne, of the Dramatic Department, expects to give two plays, one this fall and the other next spring. A challenge for debate from Lowell has been received by Hirschler, which he expects to accept.

THE TIGER.

GIRLS' PASTIME CLUB.

On Wednesday, August 10, 1910, the Girls' Pastime Club held its first meeting to discuss the plans for this year. Representatives of the different activities, who had been previously chosen, spoke to the girls about the necessity of recreation as well as study, for, as a member of the faculty said, "All work and no play makes Jill a dull girl."

Several teachers spoke on the benefits to be derived from participation in student activities, and urged all the girls to try the sport most interesting to them. There are many sports to choose from—basketball, tennis, boating, swimming, tramping, and the less vigorous Glee Club and the new organization, the Sewing Guild.

The election resulted as follows:

President—Miss Sophie Feldermann.

Secretary—Miss Aileen Eagleson.

Yell Leader—Miss Madeleine Barriau.

Girls, we wish you success, and don't forget to support your teams, because it is the support that counts.

CAMERA CLUB.

With a little support the outlook for the Club will be the brightest in a number of years. A great many students including many Freshmen have already joined. On September 21st the members will have an opportunity to exhibit their best pictures as a contest is now being held. The Camera Club plans to hold an outing in the near future. A new dark room has been provided with excellent facilities for developing and printing pictures. Every one can join and enjoy the pleasant times that are to be had on the Camera Club outings.

CALIFORNIA.

Captain Ostrom: "C-O-M-P-A-N-Y, ATTEN-----*SHUN!* Sergeant Eveleth, call the roll."

Sergeant Eveleth (Calls the roll as far as privates, all officers and non-coms. answering present): "Privates Banta, Chatfield, Deleray, Felt, Hornick, Henderson, Kuchel, Lawton, Meeker, Nachtrieb, Pitchford, Purser, Ruebke, Sugarman, Wales." (All answer present.) "Sir, all are present and accounted for."

Captain Ostrom: "Take your post. SQUA-ADSRIGHT-----*MARCH!* COMPANY FORWARD, column right-----*MARCH!* HE-E-P!-----HE-E-P!-----HE-E-P!"

And off they go, down to the dusty baseball grounds for drill.

Of course they're not all in the same company, but they're all there just the same! And besides that, this August has brought us "Fat" Merrilees, "Magenta-Top" Mitchell and "Yank" Rodgers. Rodgers claims that he's rightfully a Soph. 'cause he put in a year down at Stanford. Of course the rest of us can't agree with him, because anyone who spends a year down at Stanford has just wasted that much time! (Hey, there! You mustn't hit a man with glasses!)

While we're on the subject, I might as well mention that, as there are ten Lick fellows out for the Varsity squad, California has the big game cinched. If you don't believe me, wait and see.

"Shark" Graff probably won't be back. I'm told that it's because he fell off a 40-foot cliff and wrecked his constitution. Perhaps it is, but he doesn't look much the worse for wear—he was over to watch the first football practice. Seems to me his constitution (or disposition?) always was kind of bad.

The above goes to remind me that one of the Chinamen down at Summer Camp (U. C. C. E. crowd) fell off a cliff down there—turned several somer-

saults on the way down, and landed on the small of his back. Of course, that's nothing—but a week afterward he acquired the measles. Perhaps that doesn't interest you either, but *now* we're coming to it. The "chink" wasn't the only one who got the measles. Billiken Ashley got jealous when he saw that the "chink" didn't have any work to do, so he gathered in a case himself. The Lick delegation was quite shocked at his childishness, and said that he was very "rash"! He has recovered now, though, and is able to take nourishment, thank you.

Remember "Long John" Martin? He thought he was '09 at Lick, but during his Junior year became dissatisfied (?) and decided that he could get out sooner by transferring to San Jose High. He just entered with the '10 Class from there. Smart John! He claims that he has lost fifteen pounds, an appendix, and that he has had many sleepless nights since he left "dear old Lick." He looks just as intelligent as ever, in spite of all those drawbacks.

"Brick" Tufts, once Lick '09, and one of our most "brilliant" debaters, is also among the Freshies. He's out for football this term.

The Freshies have gotten off pretty easy this term, but in spite of it all, Wales considers himself abused. You see, he's just within one unit of being a Soph., but nevertheless he had to roll up his pants, put his coat *on* inside out, and parade with a broomstick. I understand that he was induced to propose to Grace Nicholson, too, and also with much forensic flourish delivered the Alphabet to the assembled upper classmen. Unluckily his recitation of the multiplication table was interrupted by a bucket of water from the top window of North Hall—responsibility as yet unfixed.

Grace Nicholson, Edith McDonald and Anna Schomaker are the only girls whom I have discovered so far, and I'm afraid I won't be able to locate any others, if there are any, until the students' directory is published.

All is going well in the upper classes. I noticed "Dip" Hammond hoeing weeds in the backyard of the Los Amigos Club, so I guess he's joined—he hasn't made public announcement of the fact, though. V. Fritz (need I add Lenzen?) made his accustomed number of "I's," and in spite of it all is getting to be more of a rough-neck every day. Weber is as noisy as ever and is earning quite a reputation for himself (good, bad or indifferent remains to be seen). Carl Lutz was official bugler down at Summer Camp, and on occasions when he spent the evening in Santa Cruz, to quote V. Fritz, "Ben Small insulted the atmosphere with unseemly and inharmonic sound." Everybody seems to have pulled through—if not wholly, at least in pieces large enough to still remain on the board.

STANFORD.

As THE TIGER goes to press, we are without any definite news as to our Lickites at Stanford. They certainly must be lying low, for there are quite a large number of them there this year.

After the directory is published we will be able to find out just who is attending Stanford, and THE TIGER hopes to receive considerable news from that locality.



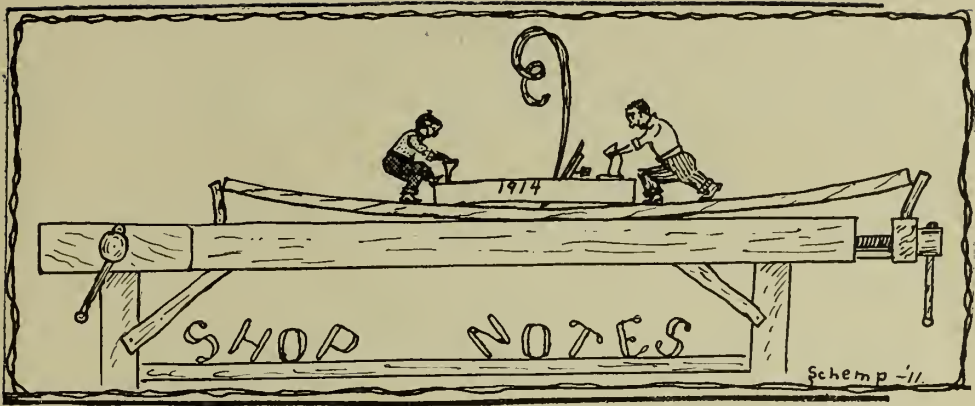
Memorial Resolutions

WHEREAS:—The hand of Death has removed from our midst our beloved schoolmate, Eugene Robert Speyer; and

WHEREAS:—His loss is shared alike, both by his bereaved family and all the members of this school;

THEREFORE be it resolved by the Student Body of the California School of Mechanical Arts:

That we extend to his family our sincerest and most heartfelt sympathy in this sad hour of affliction.



MECHANICAL DRAWING.

The ball has again been set rolling in the domain of the tack-pushers. Mr. Heymann, in conjunction with the other shop teachers, has inaugurated a new system which gives the Freshmen and Sophomores a practical idea of their shop work. The former draw the plans for their patterns and the latter plans for their forging exercises.

The Juniors have reached a high-water mark in enrollment, swelling the number to thirty-one. They are progressing finely with their standard sheets, and we may expect to see some very clever draftsmen in the near future.

The Senior apprentices are industrious but few, their number being but eight. If their worth this year is up to that of their Junior year, we may expect a great deal of them. Among the more prominent of the Seniors, W. "Demon" Young stands foremost. He has done some very creditable work on the standard sheet on flanges, and has also planned and reconstructed several popular songs to suit his own taste and intellect. Young and W. A. Moore are now busy with the construction of a five-ton wrecking crane. Small and Hauser are busy designing a large rock crusher, while Dierson is working single-handed on a coal bunker and conveyor. Litchfield and Lyon are developing into reality a centrifugal pump. W. H. Moore is working on a cone clutch for an automobile.

The strength of materials class is progressing rapidly and the students are getting a good grasp on the idea of practical application of the terrible theories which caused so much loss of sleep a short time ago.

PATTERN SHOP.

Work in the pattern shop is progressing rapidly. Mr. McLeran has taught the Freshmen how to sharpen and care for the tools, and he is giving them instructive lectures on the structure, food, density and shrinkage of different kinds of woods.

This year ten boys from each class spend a quarter working in the foundry. The experience they gain here will help them in their pattern-making work.

The apprentices are busily engaged in completing patterns which were started last year. The Senior apprentices are Wood, Nash and Meyn, and the Junior Class is represented by Campion.

A new machine has been installed in the patternshop this year by the machinshop boys. It is a joiner and will save a great deal of time for the apprentices.

FOUNDRY.

The moulders are now hard at work. The sophomores are getting over all difficulties and as yet have not burned themselves. They are now working on the small, simple patterns, but will soon be working on the more complicated ones.

Mr. Lacoste has poured already this term, in order to keep up the supply of blocks for the machine shop. However, with the present classes and outlook, Mr. Lacoste promises to keep the old cupola busy.

FORGE SHOP.

All the beginners in the blacksmith shop have had souvenirs of their work, "Blisters," and all are glad that they have finished pounding the cold iron. Mr. Mathis has taught the boys how to build their fires—in doing so, has impressed upon their minds that fifty per cent. of their work depends upon the quality of the fire.

At the present time the boys are drawing out and upsetting iron to accustom themselves to the fire as well as the hammer.

Maynard, the Junior apprentice, is doing some outside work, but as it is so early in the term, not much repairing work is to be had.

MACHINE SHOP.

The machine shop expects to keep up its high standard this year, and Mr. Sunkel, with the aid of his apprentices, is going to turn out some fine work. Story, Costa, Roberts and Garcia are working on a steam hoist, similar to the one turned out last year. They have also begun work on a balancing machine. The general classes have solved the mysteries of square round blocks and no longer wander around looking for some vacuum to clean their files with. They are making good headway on their exercises and will undoubtedly turn out some fine hack-saws and lathe tools. The members of the 1914 class have learned by this time to keep away from the wrong end of the engine belt and thus avoid a bath. "Chief" Dixon is having his trials with firemen who insist on letting the fire go out.

CHEMISTRY.

All the classes this year show a marked increase in enrollment over last year, the general chemistry classes alone reaching the one hundred and thirty mark. The Sophomores are making rapid progress in their preliminary study. The change of program has made their work better balanced than heretofore. Another marked improvement is the adoption of a printed manual of experiments, compiled by Mr. Tibbits. They are more convenient than the bulky sheets used last year.

The Senior apprentices, Alves, Leigh, Allworth and Schumacher, are getting a good grip on the more advanced work. They have finished their analysis on dolomite and are well along in the analysis of cement. The Junior representative, Howeisner, is working on his preliminary study of metal for precipitation, using the method of A. A. Noyes of the Massachusetts Institute of Technology. He has also inherited Boxton's water wagon, and may be seen violating the principle of conservation of energy as he hauls water for the Seniors. The C. S. M. A. C. A. T. A., with Grand Mogul Schumacher and Grand Scribe Leigh, expect to hold some very profitable lectures on the more complicated problems of industrial chemistry.

SEWING.

The Freshmen girls are now diligently practicing different stitches, which will aid them in their later sewing. Besides this they are hemming towels for the school.

The Sophomores have been engaged in making blouses for the "little ones" in the shops. They have also been taking measures preparatory to using the MacDowell system. The model waist, on which they are now working, teaches the first steps in dressmaking.

The third year girls are working rapidly and carefully on hand-sewed garments, which they expect to finish shortly after Christmas. They will then commence the making of apparel for the doll which is to be on exhibition.

Preparatory to making their own suits, the Seniors are working on model tailored suits. They have made an excellent beginning and their present work is rapidly nearing completion.

COOKING.

Though the Junior girls have studied the art of cookery but one quarter, they have already shown their ambition to become able cooks under Miss Hyde's careful supervision.

The girls began the year with the study of cream soups and beverages, because they furnish the soups and coffee for the teachers' lunch table. As it is fruit season they are now canning fruit. This requires some study of bacteriology, in which they are at present interested in domestic science. The canning will be followed by jellies and preserves.





AMERICAN FOOTBALL.

Lick will play the new game this fall, but not Rugby; for the "new game" is old American football.

American football has, to a certain extent, been revolutionized. Radical changes have been made in the rules to lessen the danger and to make the play more open. Let us hope that the "hue and cry" against football will now stop.

The most important differences are the division of the time of play into "quarters" instead of "halves"; the abolition of the "flying tackle"; giving permission to the center to pass the ball to any player instead of only to the quarter; allowing the quarter-back to "buck the line"; permitting a man to leave the game and return at the beginning of a "quarter," and the prohibiting of one player of a side to assist another by dragging, pushing, or carrying him in any manner whatsoever. The rules regarding "forward passes" and interference with the defense on punts have also been revised. The territory for twenty yards from the line of scrimmage is now "neutral."

Between the first and second and also between the third and fourth "quarters" there will be a three-minute rest, during which time no one can leave or enter the field. But the rest between the second and third part of the game will be for fifteen minutes, which time is also the duration of each "quarter." The team will be allowed to leave the field then as before between the "halves."

As one wit remarked, that while before it took six "halves" to make a whole game, it now takes but six "quarters." It takes a football mathematician to see from these figures that although the danger varies directly, the interest varies inversely; that is, while possibility of getting hurt becomes one-half, the interest to both the players and spectators becomes twice as great.

Now, more than ever, the qualities of "speed," "grit" and "brains" will mark the successful football player. The days of the beef trusts are doomed, a very lucky thing, as "meat" is scarce. But the axiom that a "good big man" is better than a "good little man" still holds true.

The open game, which will necessarily have to be played under these new rules, will do away with the adverse criticism to American football, and many prodigals will return to the fold when they realize the great advantage of the new "old game."

THE FOOTBALL TEAM.

As regular as autumn, the fall of the year, comes, comes football, the fall of man.

At the beginning of the second week of school the squad began digging up our field with their noses. They have been doing so ever since. About thirty-five noses have been counted; but Mother Earth has made some of them minus quantities.

Of all the squad but one is positively certain of his position on the team. Our coach, "Sid" Holman, is the solitary one. It has often been stated that the quarter-back is "the team"; however, the coach is the man who is really "the team." The coach makes it or breaks it.

Sid is making a machine which, after it has finished action, is going to be called "The Champion." If teams had followed the direction of their leader many a defeat would have been turned into a victory. The Lick team will follow "Sid's" orders, for it is only through obedience to the orders of a superior that success comes. The spirit which the coach instills in a team counts for much. The spirit with which Coach Holman has imbued the squad is the same as it has been in the past three years—the same as it has been since the Middleton brothers first coached the team.

Sidney Holman was captain of the team in 1908. It was in the same year that a Lick football team last had his physical services in the game, but since then he has been the "brains" of the team. He is no longer one of the eleven who enter the fray, but he is the "twelfth man"—the man who stands on the side line and who is responsible for every move the team makes.

Still no coach can turn out a championship team without good material. We certainly have some. Every afternoon they line up for practice. The "old settlers" will recognize among them many veterans. "Al" Wetmore, our last year's captain, still punts to "Windy" Westphal; "Spud" Khart, "Booze" Nash, "Colonel" Stuhr, "Spud" Barker and "Frenchy" Henderson, while "Artie" Wynne and Captain "Hunk" Wetmore also "spiral" the ball (sometimes) to the waiting players. These men have all had league experience.

Vale Chapman, Thane Clark, Wood Young, Edgar Rust and "Fat" Ranklin of last year's squad are fighting hard for a place on the team. This makes fourteen of last year's squad who have returned.

These players together with the new material, which has shown up exceptionally well, will make the team hard to beat.

The fight for position is very close and interesting. The old players will have to extend themselves to hold their places. For the first time in years all the teams seem to be well supplied with "vets," and though this les-

sens our chance, it will surely give the spectators a chance to see many first-class games of football.

Our team will be managed by Lloyd Litchfield and captained by Paul Wetmore. Both of these boys have already made good in their positions.

The fight for the championship will be a hard one—a fight of veterans against veterans; but Lick will win if each and every one of you students, and you alumni, back the team. Each victory is a rung on the ladder to the championship, which is won, not by eleven players, but by five hundred students.

TRACK.

There will be a radical change made in track athletics in the San Francisco Sub-League this fall. At the first meeting of the League officials, it was decided to adopt the weight system. This system has worked with great success in the East, and in the Public Grammar schools in this city. The purpose of athletics is to develop the weaker boys. Under the old system, the boys who need developing are unable to withstand the competition of their stronger rivals, and so do not come out. It is expected that under this new system track will receive a great deal more support than in the past.

Our track team does not expect to do as much in the fall, when football is being played, as in the spring, but still they expect to make a good showing. We have a number of veterans back this fall who should do good work. Of last year's team there will be Capt. George Henderson, Manager Smith, Rogers, Lenzen and Leigh in the sprints. Rogers is good for eight or ten points in any meet. We are sadly lacking, however, in distance men, not one being left of last year's team. Wallfish and Hohman are good for points in the hurdles, and Maynard is doing well with the shot. Haffen and Dunshee will take care of the hammer and pole vault.

An innovation in track this fall will be a novice's interclass. It will be limited to those who have never been on a school team. It will come sometime in September, and will give a line on the material we will have for the San Francisco.

SWIMMING.

Capt. Frank Halbert is hard at work with a large squad of swimmers, and has high hopes for a winning team. The fellows are coming out well, especially the Freshmen, several of whom will make a strong bid for the school team. Capt. Halbert will swim the sprints, and we expect great things from him. Of the others, there are Al Wetmore, Rankin, Maunder, Shaw, Litchfield, Wallfish, Snook, Tissot, Woods and Manager Erickson, and a large squad of Freshmen to choose from. There will be an A. A. L. and possibly a B. C. L. swimming meet.

On Wednesday, August 24, the Interclass was held at Lurline Baths, and proved a rather easy victory for the Seniors. The Juniors were a good second, with '13 and '14 bringing up the rear. Halbert was the star, taking two firsts. Maunder was also a good point winner. Those made the only points for the Freshmen by taking the second in the 220. The final score was: Seniors, 26; Juniors, 15; Sophomores, 10; Freshmen, 3. The results:

50 yards—Shaw, '12, first; Richardson, '13, and Litchfield, '11, tied for second.

100 yards—Halbert, '11, first; Litchfield, '11, second; Richardson, '13, third.

220 yards—Halbert, '11, first; Those, '14, second; Trepke, '12, third.

440 yards—Snook, '13, first; Maunder, '11, second; Rhode, '12, third.

880 yards—Maunder, '11, first; Worth, '12, second; Martin, '13, third.

Relay—Juniors, first; Seniors, second; Sophomores, third.

At Lurline Baths, on August 29, Lowell defeated our team by a score of 38 to 16. Several of our men swam well, but Lowell had a splendid team. Smith of Lowell won three first places and Jones won two. Maunder and Halbert swam the best for us; Maunder taking two seconds and Halbert one second and two thirds. The result:

- 50 yards—Won by Smith, L. H. S.; second, Hall, L. H. S.; third, Halbert, C. S. M. A.
 100 yards—Won by Jones, L. H. S.; second, Hall, L. H. S.; third, Halbert, C. S. M. A.
 220 yards—Won by Jones, L. H. S.; second, Halbert, C. S. M. A.; third, Meyer, L. H. S.
 440 yards—Won by Smith, L. H. S.; second, Maunder, C. S. M. A.; third, Bussey, L. H. S.
 880 yards—Won by Smith, L. H. S.; second, Maunder, C. S. M. A.; third, Worth, C. S. M. A.
 Relay—Won by Lowell.

Girls' Athletics

THE GIRLS' ATHLETIC GROUNDS.

The Lick girls received rather a pleasant surprise when it was announced that they were to have their long looked for tennis and basketball courts. They are to be situated on the school property at 17th and Potrero streets.

The courts are not the only attraction, for the grounds include an assembly hall, which will be used as a club house for the girls in general. This, of course, will prove a great benefit to the girls for they will be able to practice at any time.

Heretofore they have had no permanent athletic grounds, being forced to share the present court with the boys.

BASKETBALL.

Although all branches of athletics were given a good boost at the meeting of the Girls' Pastime Club, basketball, as usual, has attracted most of the girls. A goodly number of the girls have turned out for each practice, and we are expecting big results from them in the interclass. With Gladys Herbert as captain and Sophie Felderman as manager of the big team, we look forward to some big doings, as both are numbered among our best players. The interclass will be hotly contested for between the three upper classes, as they have developed excellent teams.

SWIMMING AND BOATING.

Swimming and boating both seem to have taken a strong hold with the girls this year. The committees in charge of each have decided to have their outings on alternate Wednesdays. A successful swimming outing was held Wednesday, August 17th, at the Lurline Baths, due to the earnest work of Miss Von der Mehden in getting the girls interested.

TENNIS.

Tennis will not be actively engaged in until after Christmas. Miss J. Brown was elected manager by the Board of Control, and we know we will come out successful with her at the head. The committee has arranged that tennis practice will be held every Tuesday and Thursday on our court and out at the Golden Gate Park courts on Wednesdays.

Girls, choose some activity and show the true Lick spirit.



TWO OF A KIND.

Tag and Wint, you're babies sweet,
 (Such through life we always meet.)
 Always happy, always gay,
 Make a month seem but a day.
 Cute and cunning are you too,
 Mischief makers, well a few,
 (Fun partakers, always they,
 Why it is I will not say.)
 In a school like dear old Lick,
 To erudition you must stick,
 Here many a fellow has met his doom,
 And for others made more room.
 So take the tip and know what you're about,
 Or the faculty will get you if you don't watch out.

—F. W. B.

HAVE A CARE.

A little Freshman came one day,
 His name was Johnny Jones;
 He learned to follow the Golden Rule,
 "Never cut or be naughty in school,"
 He followed the rule most fervently,
 But one day came to grief,
 He failed in all his ex's, and
 That was where poor Johnny's beef,
 Received the "can."

GEOGRAPHY.

Teacher—John, name the zones.

Johnnie—There are two kinds of zones, masculine and feminine. The masculine are both temperate and intemperate, and the feminine are both horrid and frigid.—Ex.



Little girl,
Box of paints;
Sucked the brush,
Joined the saints.—Ex.

Miss Wilkins—Who can give me the definition of a down?

Wise One—A level sloping piece of land.

Hirschler is our human "talk-a-phone,"
The words he reels out make us groan;
At the rallies he's there
With lots of hot air,
Say, what do you think of this "Talk-a-phone"?

"Ever go to the tailor?"
"Yes, most expensive man. I got two suits from him; a dress suit and a law suit."—Ex.

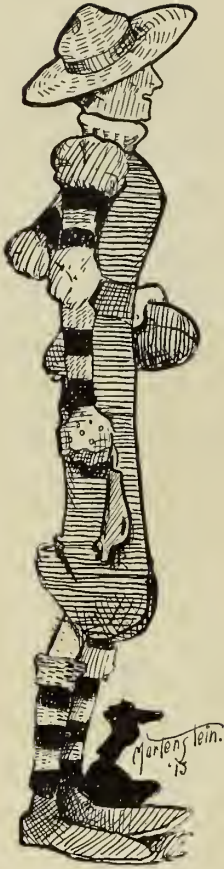
NEVER HEARD OF HIM.

Teacher—Children, Michael Angelo often worked for months on one curve.

Willie—Aw, gawan' watcher givin' us. I never heard of that "bush leaguer."

Water Flood (ed) the Brown Wood (en) four-Story House until Tag got the Shoemaker, who, with his Shield, swam Plum (A. C.) Ross the Barriueu and (r) Escue (d) the Young Goodmann who was contained therein. As it was Winter and the Waters were cold, this Chap was Meeker and Moore Slack than usual but felt better after Martin's Stein full of Rusty Black Coffee had been given him. He was well in a few days, so bought a Mitchell with money that Otto have been Meyn. Now he buzzes around this Berg, Bums gasoline, and Takesher (Haker) all over the Hills. She calls him Her-bert and he calls her his Holling-berry. What's more I lost my Chilli-cote that Costa bunch of Nickels, so I can't Wynne nohow so will Phillip and Leigh (ve) her.

THE TIGER.



Have you ever noticed this chappie,
How he always seems-so happy?
The reason is this,
And it's time I wis,
He's a football "Bug," this chappie.

WARNING TO FACULTY.

Said Old St. Peter at the Gate:
"O, look who's coming here,
It's the Lick School faculty,
They can't come in, I fear."

A TRAGEDY.

The tramp stood on the railroad track,
The train was coming fast.
The fireman rang the bell,
The train went whizzing past.

Mary has a little lamb,
It fell into the brook,
Mary cried, "What shall I do?"
The lamb cried, "Get the hook."—Ex.

ANSWERED.

In the summer time, in a little town (when the windows were raised) the churchgoers were able to hear the cries from the ball field, as well as the sermon. One day the preacher was laying it on the devil, when a cry came from the field: "Swat him, Bill; swat him." The preacher brought the sermon to a close just as soon as he could control his congregation, so he finished thus: "How are we going to gain salvation?" The response quickly came from the ball field: "Slide, Bill; slide."—Ex.

"BABIES."

If a Lick Senior is a "Tiger,"
Why then are the Freshmen "Scrubs?"
Let us correctly rather
Call them "Kittens" or "Cubs."

Miss Hyde (in Junior Cooking Class)—The "canning" will be followed by jellies and preserves.

A MIXTURE.

Freshie (in cooking class)—O, I put two kinds of mush in this pan.

Senior (philosophically)—Well, that's not the first time two mushes came together.

Scrub—What comes after the fourth period in the morning?

Soph—A dash.



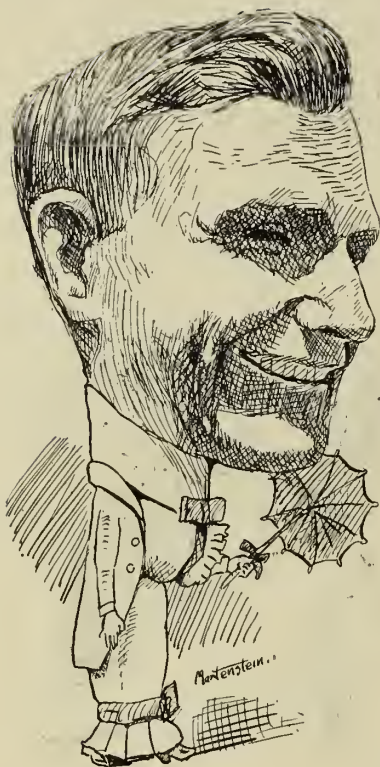
TOO TRUE.

Football heroes, large and husky,
 Swarthy swimmers, lithe and dusky,
 Baseball men, 'bout umpires cranky,
 Speedy runners, tall and lanky,
 Fighting for their alma mater,
 Home returning, each night later,
 Each night fewer lessons study,
 Fewer times with answers ready
 When the teacher on them calls,
 Till we miss them from our halls.
 If we ope the office door,
 We will see them on the floor,
 And we know that they are fated
 To be early graduated.

—W. R. M.

BASHFUL BOY.

There's a young man we call Pres. House
 And he's as quiet as a mouse;
 From the girls he will shy
 When they pass him by;
 Oh! he's terribly timid, this House.



ECONOMICS.

Teacher—How would you treat suspense?
Brilliant One—At the least expense.

KNOW HIM?

Who is it that runs like the wind?
Who in English has such a mind?
Who better at football could you find?
Who? Why it's Artie.

Oh, don't you think it is mean
That no more '10 girls are to be seen?
For Artie is back,
And you know well a-lack
He was Lick's '10 renown Queener.

A GOOD ANSWER.

Miss E. (explaining train problem)—Which train leaves first?
Whetmore (not thinking)—The first one.

INSTINCT.

Berg (in English)—He was such an intelligent dog that he soon made friends with me.



ODE TO BOARDING HOUSE.

Good soup is pa's delight;
 My sister likes tea;
 Edgar eats potatoes raw,
 But pancakes are the things for me.

THESE WORDS IN DUTCH.

T. M. O. (to class)—Remember we will write orally at the board tomorrow.

EVEN THE "PROPS." DO IT.

Chief with a bucket,
 Scrub with a hat,
 Chief tips the bucket,
 Scrub a drowned rat.

Dark street,
 Banana peel,
 Fat man,
 Virginia Reel.—Ex.

Klein (working ice-berg problem in physics)—Let x = feet of Berg under water.

Lost—In Sr. Eng.—"A skew."

Johnnie Ryan has came back.



If it's not because he can bark like a dog of great size,
 If it's not because in an animal show won first prize,
 If it's not because he has a temper for which he is famed,
 Then why is it this lad, Bulldog Clark is named?

"Ever go to the tailor?"
 "Yes, most expensive man. I got two suits from him; a dress suit and a law suit."—Ex.

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Mr. Lyser—Mary, what is the definition of tripping?

Mary—Running.

Mr. Lyser—Johnnie, what does conclusion mean?

Johnnie—The end of.

Mr. Lyser—Willie, a sentence with both of those.

Willie (after pondering a moment)—The elephant came tripping down the hill with a tin can tied to his conclusion.—Ex.

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Endless muttering,

Endless puttering,

After words.

Continual missing,

Always hissing,

And then just listen,

Can's the word.



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The Fall models of suits and overcoats are now ready for your inspection. The styles and colorings are those of the new season.

The Hastings Clothes

are tailored in our own shops and meet the demands of the most exacting young men, and can be worn with the assurance that the style, material and tailoring are of the best.

Our Young Men's Dress and Tuxedo Suits are absolutely correct in every detail.

Hastings Clothing Co.

Post and Grant Avenue

Hills Bros.



Highest
Grade
COFFEE

The parsons and preachers and
Sunday School teachers,
And deacons all over the Coast,
They all of them think it not
sinful to drink
A cup of Hills Bros. Roast.

Particular People Prefer Packages
HILLS BROS., San Francisco

Thirteen.

Sophomore year is no "Yoke,"
By the end of it we'll surely croak,
With Chem.—so queer,
And Geom.—I fear,
We'll be the Lick School Joke.

Camera Cranks

want yours, BUT only on one condition. We will give you better results with Letol and Erogen Developers on plates, films and papers, **than any other made.** (Use what Professionals do.) If we can't prove this, your money back. Our other Letol specialties in Intensifiers, Restrainers, Sepia Developers, Flash Powders, etc., are just as good. **Lastly,** we have salesmen that can give you more advice and assistance than found in any other store on the Coast. Will you call and prove these statements? Tell us what school you attend and help your advertising department

We are going to put this **right up to you,** and **see** if you reciprocate. You know this ad. costs money, and should appeal to you. **You** have our money, now we

Western Photo Supply Co.

82 THIRD STREET

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Marwedel, C. W.—Machinery.
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Ogle, F. J.—Stationery.
Overall Laundry.
Pfister, J. J.—Dry goods.
Pappas, B.—Groceries.
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Ratto Bros.—Groceries.
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WOOD, COAL, HAY AND
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OAKLAND

Louis Scheeline

UP-TO-DATE CLASSY
-- SUITS --
AT POPULAR
PRICES

*Special Inducements to
High School Students*

Customer—I have a mug here I would like engraved.

Jeweler—Sorry, sir; the barber is across the street.—Ex.

Willie—If I had six slices of bread and took away four, what would I have left?

Tommy—A sandwich.—Ex.



Sartorius Company, Inc.

· Ornamental Iron & Bronze ·



· ELEVATOR ENCLOSURES & CABS · METAL STORE FRONTS ·
· STAIRS · RAILINGS · BANK ENCLOSURES & RAILINGS ·
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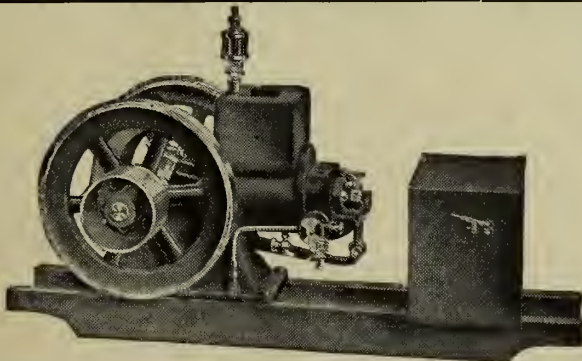
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Fourteen.

There is a big fellow named Paul,
Who captain's his team at football
With his voice sonorous,
He lords it o'er us,
And us Freshmen he does quite appall.



\$75⁰⁰

1½ H. P.
“Bull Dog” Gasoline
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TOOLS
FOR ALL TRADES

Hardware,
Cutlery, Etc.

1182 MARKET STREET

Near Eighth

Phone Market 995 SAN FRANCISCO

Harold—Is God everywhere?

Mother (patiently)—Yes, Harold.

Harold—Is he in the teapot?

Mother (embarrassed)—Why—why—yes.

Harold—Is he in the sugar bowl?

Mother (frantically)—I told you God was everywhere.

Harold (triumphantly placing his hand over the top of the sugar bowl)—Hurrah! I've got Him.—Ex.

Careful

Chefs

Always insist upon
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**CROSSE and
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Pure Lucca

OLIVE OIL

Your grocer sells it at
 the same price of poor
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Overalls, 12½ cents Pattern Makers' Suits, 15 cents Jumpers, 12½ cents
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San Francisco

Telephone Market 143

A summer tourist was passing through a German village in the West recently, when a German girl came to the front door and called to a small girl playing in front: "Gusty! Gusty!" she said, "come in and eat yourself; ma's on the table and pa's half et!"

JOHN FINN, President

ROBERT B. FINN, Secretary

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Your Old Books taken in part payment for those you have to buy this year

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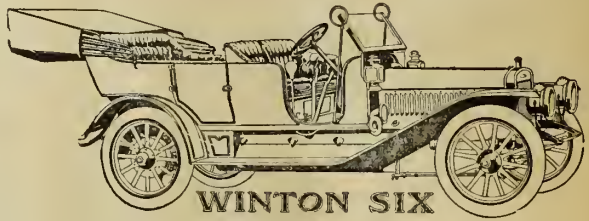
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You will never be satisfied with a four after you have ridden in the \$3000 *Self-Cranking, Sweet-Running, Six-Cylinder*

WINTON SIX

If you do not already know that this six-cylinder car is superior to the most expensive fours, it will be a delight to us to spend half an hour with you, looking over this car.

Our 1911 Model is here.
Our telephone number is
Market 1672.



WINTON SIX

The Winton Motor Car Co.

300 VAN NESS AVENUE -- -- SAN FRANCISCO, CALIFORNIA

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Miss Wilkins—Who were the other great Greeks at the time of Sophocles?
From Rear—Bill Pappas.

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